## OXEN THIGH BONES USED TO MAKE WARTIME BRUSHES



'A drilling shop. Boring tooth brush handles.' W. R. Tilbury & Co, Brush Manufacturers, Hackney, London, England. With thanks to BDA Museum.

The cover of this issue of the *BDJ* shows a World War I kit bag with toothbrush.

British troops in WWI were issued with a toothbrush as part of their kit. The kitbag or holdall generally contained: a button brass (to keep metal polish from staining the uniform), a razor, a toothbrush, a shaving brush, spare leather boot laces, and a knife, fork and spoon. A tin of tooth powder is also displayed on the left in this cover image. Tooth powder was not standard issue in WWI and would have been an optional luxury item for the troops.

Rachel Bairsto, Head of Museum Services at the British Dental Association (BDA), provides some historical background on the manufacture of toothbrushes in the early twentieth century:

The manufacture of tooth-brushes was very labour intensive with over 50 processes involved. Thigh and buttock bones from oxen were usually used for the handles and brush backs. They were boiled to remove the fat and grease and the ends were sawn off and sold to button makers. The pieces were subsequently passed to 'fashioners' who roughly shaped them with wooden carpenters' planes. The brushes came with a variety of head sizes and handle ends.

Other workers drilled the holes to take the tufts of hair. This was

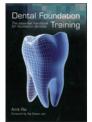
done by hand with a small bowdrill or by a foot operated drill. The backs were then 'graved' with thin channels which connected the holes to accommodate the wires that held the tufts in place.

Next the brushes were tumbled in large revolving drums to give them a smooth surface and polished by hand. They were then bleached - originally in strong sunlight and later by soaking in hydrogen peroxide. Finally the 'knots', as each bunch of hair were called, were drawn into the holes by the wires in the back of the brush. Traditionally horse or pigs' hair was used. This work was often sent out to women to complete at home. The bristles were then trimmed with a pair of shears and the graves filled with a resinous wax or later a cement.

Solid dentifrice was introduced to the British market in 1906. It consisted of a block of compressed toothpowder in an aluminium tin. It became a firm favourite and an integral accompaniment to the toothbrush.

Records suggest that some soldiers' toothbrushes were used to clean boots, rather than brush teeth. However, those soldiers who returned from the war introduced the toothbrush to the family home, sparking an increased demand for toothbrushes. A good bone and bristle brush could be purchased for 1 shilling (5p).

## **BOOK REVIEW**



DENTAL FOUNDATION TRAINING: THE ESSENTIAL HANDBOOK FOR FOUNDATION DENTISTS

A. Rai Radcliffe Publishing price £29.99; pp 160 ISBN 9781846199974

This is a guide aimed at smoothing the way for dentists undertaking foundation dental training (FT) or competency assessment (FT equivalence) in the UK and to give them a deeper understanding of this vital year. The aim is to give an insight into both the essence and practicalities of training, which makes it an indispensable resource for young dentists.

This conveniently sized, 160-page paperback is divided into nine chapters, with references footnoted throughout and helpful 'Action point', 'Thinking point', 'Reading point' and 'Tip' boxes interspersed within the text. The initial section explains the objectives and structure of foundation training, including the recruitment process. The 'FT journey', educational requirements and clinical expectations are explained. This is followed by a chapter on general dental practice, including a useful set of checklists.

The teaching and learning process and curriculum for FT are covered in the next chapters, covering both the practicalities of competencies and study programmes, and the theoretical aspects of learning styles. The E-portfolio is also explained thoroughly in the subsequent section, which is useful as this is often new and confusing.

The remaining chapters cover issues facing FT dentists, including career options following completion of training and applying for jobs.

Dento-legal considerations are also addressed, with advice on complaints management and clinical governance. Valuable chapters on running into difficulties and a survival guide give further practical advice, tips and dos and don'ts – including how to maintain motivation, avoid back pain and communicate well with trainers and patients alike. The author's experience in the training process is clearly evident in his writing.

This guide may require updates in future to ensure advice remains relevant. There is also very little specific information for those involved in FT in Scotland, with only cursory paragraphs explaining the differences to the England/Wales/Northern Ireland systems. Despite this, the majority of the guide should prove enduringly valuable for those involved in foundation training.

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